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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,454	10/15/2003	Tushara Kanta Swain	TI-36175	4568
23494 7590 03/07/2008 TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265				
EXAMINER CHO, HONG SOL				
ART UNIT 2619		PAPER NUMBER		
NOTIFICATION DATE 03/07/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

10/684,454

**Applicant(s)**

SWAIN, TUSHARA KANTA

**Examiner**

HONG CHO

**Art Unit**

2619

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-148 is/are pending in the application.
- 4a) Of the above claim(s) 11-37, 48-74, 85-111 and 122-148 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 38-44, 47, 75-81, 84, 112-118 and 121 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 45, 46, 82, 83, 119 and 120 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

1. Applicant's election without traverse of claims 1-10, 38-47, 75-84 and 112-121 in the reply filed on 2/7/2008 is acknowledged.

### ***Specification***

2. The abstract of the disclosure is objected to because it includes the title of the invention. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

3. Claims 9, 46, 75-84 and 120 objected to because of the following informality:  
  
Re claims 9, 46, 83 and 120, line 3, "said identifier" lacks antecedent basis.  
  
Re claim 75, line 1, "A machine readable medium carrying" should read - - A computer readable medium encoded with - - .  
  
Re claims 76-84, line 1, "The machine readable medium" should read - - The computer readable medium - - .

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 38-40, 75-77 and 112-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fite et al (US 6252888), hereinafter referred to as Fite, in view of Meier (US 6847620).

Re claims 1, 38, 75 and 112, Fite discloses operating a network device in VLAN aware mode or VLAN unaware mode, receiving a packet on a first port contained in the plurality of ports, and processing the packet either VLAN aware mode or VLAN unaware mode (column 6, lines 37-49). Fite fails to disclose receiving a configuration data indicating whether the bridge is to operate in VLAN aware mode or VLAN unaware mode. Meier discloses configuring a bridge to operate in VLAN aware mode or VLAN unaware mode depending on the nature of a detected access point (column 3, lines 40-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fite with the teaching of Meier in configuring a bridge to operate in VLAN aware mode or VLAN unaware mode for the benefit of providing interoperability of VLAN tagged and untagged frames.

Re claims 2, 39, 76 and 113, Fite discloses determining a destination port based on a destination address contained in the packet and sending the packet on the destination port (column 4, lines 1-10).

Re claims 3, 40, 77 and 114, Meier discloses storing an address table in a content addressable memory (CAM), wherein the address table indicates a specific one of the plurality of ports on which each packet is to be forwarded; and providing in the address table a field to store data representing a VLAN identifier (column 10, lines 17-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fite with the teaching of Meier for the benefit of determining the appropriate routing for the received frame.

Claims 4, 5, 41, 42, 78, 79, 115 and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fite in view of Meier and further in view of Brady et al (US 5914938), hereinafter referred to as Brady.

Re claims 4, 41, 78 and 115, Brady discloses comparing the VLAN ID and destination address with those stored in its forwarding table (column 5, lines 3-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fite with the teaching of Brady for the benefit of determining the appropriate routing for the received frame.

Re claims 5, 42, 79 and 116, Fite discloses receiving untagged frame without the VLAN tag information (column 3, lines 60-65).

Claims 6, 7, 43, 44, 80, 81, 117 and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fite in view of Meier and further in view of Foote et al (US 20050018605), hereinafter referred to as Foote.

Re claims 6, 43, 80 and 117, Fite discloses receiving untagged frame without the VLAN tag information (column 3, lines 60-65). Brady discloses comparing the VLAN ID and destination address with those stored in it's forwarding table (column 5, lines 3-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fite with the teaching of Brady for the benefit of determining the appropriate routing for the received frame. Fite fails to disclose setting a VLAN identifier associated with said packet to equal an identifier associated with an incoming port on which said packet is received. Foote discloses allocating VLAN IDs to the first service on the respective port (paragraph [0009], lines 6-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fite with the teaching of Foote for the benefit of determining the appropriate routing for the received frame based on input port associated with VLAN ID.

Re claims 7, 44, 81 and 118, Meier discloses inserting tag information into the packet before sending the packet on the destination port configured for forwarding in VLAN tagged format (column 14, lines 63-66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fite with the teaching of Meier for the benefit of providing interoperability of VLAN tagged and untagged frames.

Claims 10, 47, 84 and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fite in view of Meier and further in view of Bryden et al (US 7221675), hereinafter referred to as Bryden.

Re claims 10, 47, 84 and 121, Bryden discloses an Ethernet bridge in Ethernet network (column 1, lines 50-58). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fite to be performed in Ethernet network using Ethernet bridge for the benefit of conforming to IEEE standard 802.1Q.

#### *Allowable Subject Matter*

6. Claims 8, 9, 45, 46, 82, 83, 119 and 120 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/H. C./  
Hong Cho  
Patent Examiner  
2/27/08